

Newspaper Clips

March 4, 2012

Deccan Herald ND 04.03.2012 P-4

Robots fight in IIT tech fest, pulls huge crowd

NEW DELHI, DHNS: Around 4,000 students from different engineering colleges of the country flocked to Indian Institute of Technology (IIT), Delhi to take part in its Annual Tech Festival 'Tryst' which began on Friday. The highlight of the festival is Robo-Wars in which the students make robots.

"This event is a major crowd-puller and takes place every year in our tech festival. Students have made car-like machines and they put these machines or robots to fight with an opponent machine," said Shubham, one of the co coordinators of the event.

According to student organisers, mostly the students from north Indian engineering colleges have participated.

"Students from Punjab En-

gineering University, IIT Rajasthan and Roorkee and Delhi College of Engineering (DCE) took part in the competition. The winners will get cash prizes," added Shubham.

The whole idea behind Robo-Wars is to knock out your opponent by showing the power in your machine. "One student from IIT (Delhi) had so far taken part in this and was knocked out," added Shubham.

A workshop on Human Robots is also scheduled in which the experts will have a look at the robots designed by the students and then teach them how to make them better.

Companies like Robosapiens and Team Gatik have put their customised Humanoid series at display. "These Hu-

manoids are very advanced and still not available in India. Humanoid Gatik II is the latest in the series of customised human robots," said a member of TeamGatik.

The fest is on till Monday; it has other interesting events lined up. Students will fly their miniature planes aeromodelling competition.

For car racing lovers, there is a bug race in which students will race small cars. Multi-level gaming contest, laser show, transforming trash to tools and fake research papers are also in store.

"Keeping in mind the theme of the event, Sci-Fi, the movie Star Wars will be screened during the festival," said student co ordinator Vineet Kumar.

Business Line ND 04/03/2012 p-3

Size of young population offers private sector opportunities in higher education: Sibal

Our Bureau

Hyderabad, March 3

There is huge opportunity for the private sector in the higher education sector, according to Mr Kapil Sibal, Union Minister for Human Resource Development and Communications.

Delivering the convocation address at the Maulana Azad National Urdu University here on Saturday, Mr Sibal said the sheer size of the young population and problem of providing education and employment to them would give "great opportunities" for the private sector.

"Private higher education accounts for about four-fifths of enrolment in professional higher education and one-third in overall higher education," he said. By 2020, about 45 million students would go in for higher education from the present level of 13-14 million.



Broader vision: The Union Minister for Human Resources and Communications, Mr Kapil Sibal, in conversation with Dr Syeda Saiyidain Hameed, the Chancellor of the Maulana Azad National Urdu University and Member, Planning Commission, in Hyderabad on Saturday at the 4th convocation of the university. - P.V. Sivakumar

"It is here we need help from private players," the Minister said. As higher education is increasingly becoming a global enterprise, Indian institutions should embrace internationalisation.

Partnerships with foreign education providers would be critical in this transformation, he said.

"My vision is global education and commitment to internationalise Indian higher

education, especially through partnerships with foreign institutions," Mr Sibal said.

BUSINESS SCHOOLS

There is a need to teach socially-relevant issues in the management schools, including issues such as management for poverty, managing millions of teachers in schools and their administration should be studied.

"However, at the moment, our management schools are more centred on getting placements for their students in big firms for fat salaries," the Minister said.

On the status of previously-proposed 'Navaratna' universities, he said as per the first draft prepared by the Government, the selection of these universities would be made from University Grants Commission supported universities.

A bottle full of light

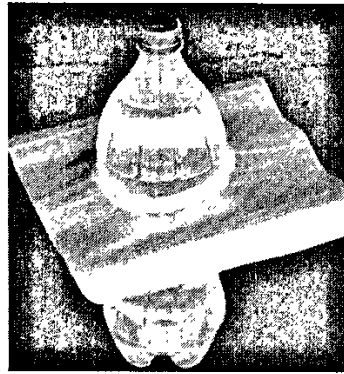
Students of IIT Powai turn waste plastic bottles into solar bulbs to bring clean and cheap light to dingy Mumbai slums

Virinda Malik

An empty plastic bottle, litre of water, few spoons of bleach -- that's all that the students of IIT Powai needed to bring light to the homes of slum dwellers in Gowandi.

Inspired by Isang Litrong Liwanag's campaign carried out successfully by the My Shelter Foundation in the Philippines, students of the department of metallurgical engineering and material science decided to bring light to the dingy rooms of Mumbai slums. "We saw the simplicity of the solar bottle bulb and wondered why we couldn't implement it to lighten up slums in Mumbai," explains the group that worked for over four months to bring the simple yet ingenious idea to life -- "litre of light".

A Solar Bottle Bulb is a clear water bottle filled with tap water and a little bleach, this bottle is then embedded into the roofs of houses, with part of the bottle outside, and part of it inside. "The water



INITIATIVE: Students assembling the solar bottle bulb light. PHOTOS: IIT POWAI

inside the bottle makes the light omni directional, mimicking an electric light bulb. The bleach keeps the water clear for years," Jaydeep Soni, third year student and member of the team, said.

The group in their field trips visited slum areas in Andheri and Govandi. "The rooms were so close to each other that even the passage between them had close to no

light even during the day time. Inside the room at least one tube or bulb was required all through the day, pushing their electricity bills to Rs 400-600 each month." The students constructed few samples of the solar water bottle bulbs to show the residents how they worked, "We couldn't just drill a hole in their roofs, we needed them to like the idea and after see-

ing how simple, clean and cheap it is everyone liked the concept," Soni said.

"It is a very simple procedure, and very simple things are used but each is very important, without the bleach, the water would quickly turn green with algae. Without the water, there would be a bright spot on the floor, without the sealant there could be seepage or worse, bottle could

drop from the roof. So we are seeking volunteers to help us in assembling the parts," Sahil Dhingra, another member of the group, added.

"The only drawback of the solar water bulb is that it is functional only from sunrise till sunset, even then the electricity is saves during the day time is reason enough for slum dwellers to use it," another volunteer says as he meticulously places a water bottle inside the circular cut out of a metal sheet.

"We aim to implement this simple, sustainable technology in the slums of Mumbai at a large scale, with pilots already in place," said Dhingra. Currently busy with gathering enough volunteers to install 500 such bulbs in slums, the group of 17 students are also working closely with development organisations to find out other areas where the 'litre of light' can be of help. The students created the sample as a part of Padarth 2012, the Materials Science festival of IIT Bombay.

Admission Restricted

Government of India's strict visa regulations are a barrier for many skilled foreigners who want to work in a growing economy. Domestic startups aren't happy with the rules either

By Ishani Duttagupta

Alexandra Patargia is a 26-year-old civil engineer from Greece. After an engineering degree from Athens, she completed her master's degree in development administration and planning from London and is now keen on finding a job in India. "I have been following the India growth story for the past couple of years. My qualifications in civil engineering and development should find a very good fit in India, I feel. Besides, India is on a growth path while European countries such as ours are not doing very well," she says.

However, her job search in India has so far not yielded results. The main reason for this is the \$25,000 per annum lower limit that the Indian government has set for giving employment visas to skilled overseas workers. For Patargia, who has two years of work experience in Greece, an annual salary below \$25,000 is acceptable. "I would like to work in India to gain experience. I'm willing to start with a lower salary. I know that in my kind of job, there will be an annual increase in the salary based on performance. However, the Indian government rules don't allow that," she says.

Many young professionals like Patargia now want India on their CVs and the reason is not always mind-boggling entry level salaries. Mumbai-based lawyer Ashok Pratap, who has a growing clientele of foreigners looking for employment visas, sees the interest among young foreign professionals to work in India going beyond just good salaries. "India is an emerging economy and is now attracting many young professionals who want to come here to experience a different work culture and a way of life. Often they are willing to work for salaries that are much lower than in their own countries," he says.

The Indian government had set the salary threshold limit of \$25,000 a year for foreign nationals being sponsored by employers in India for an employment visa from November 2010. It includes salary and allowances paid to them in cash. "There's a huge number of low skilled and unskilled workforce in India and we have to cope with huge unemployment. Hence the salary threshold has been set which helps to differentiate between skilled and unskilled jobs. Different countries have different ways to protect their own workers and we have chosen this route instead of numerical caps," an Indian home ministry official told *ET on Sunday*. The annual floor limit on income does not apply to specif-



ic categories of ethnic cooks, language teachers (other than English language), translators and staff working for the embassies and high commissions.

Restricted Regime

Companies that require foreign nationals with language skills often face problems when it comes to the interpretation of the fine print. "Foreign language skills required by certain sectors, such as the BPO industry, are not available in India. Individuals with foreign language skills are ready to work in India at reasonable salaries. But the law requires them to do only language teaching and translation," says Mumbai-based immigration lawyer Poorvi Chothani.

An example is that of a large BPO company, the subsidiary of a UK entity, which recently wanted to employ a Spanish national to handle client queries. While they found a Spanish national willing to work for a salary of

about \$12,000, the employment visa could not be processed because of the minimum salary requirement. The lower salary threshold, in fact, is also applicable to women from different countries who come to India to work in the fields of modelling, advertising or films.

For many Indian startups in niche areas of business, the minimum threshold for employment visas is proving to be a damper. Suheil Tandon, co-founder and partner of specialised sports management company Pro4Sport Solutions, feels that in the business of specialised sports coaching at the grass-roots level, employing foreign nationals is important. "There are not enough sports coaches and specialists in India. In other countries, there are many young sportspersons who are well trained and many of them are willing to come and work for us in India. Some are also keen on coming to work as interns while they are finishing their training," says Tandon. India does not have the concept of an internship visa for foreign nationals.

Project Visa

Even though the Indian government has no plans currently to increase the cate-

CAUTIOUS STEPS TO GLOBAL WORKFORCE

Employment Visa

- Granted to highly skilled foreigners for employment
- They are not granted for jobs for which qualified Indians are available or for routine jobs
- The foreign national being sponsored for an employment visa should draw a salary in excess of \$25,000 a year

Project Visa

- Allows semi-skilled foreign nationals to come to India to work in power and steel sectors
- Project specific but not subject to the lower salary ceiling
- The period of the visa is of one year or for the actual duration of the project, whichever is less, with multi-entry facility

P Visa Numbers for 2011

1,000 in the power sector
400 in the steel sector

Source: Ernst & Young India

The salary threshold of \$25,000 for employment visa blocks young professionals and interns from getting jobs in India

gories under which the lower salary threshold will be relaxed for employment visa applicants, the project visa category within the employment visa regime, has come as a big benefit for the power and steel sectors.

Under the P visa, foreign nationals can come to India for execution of projects in the power and steel sectors. The visa is project specific but is not subject to the lower salary ceiling. "This visa facility was introduced to meet the huge demand from industry and helps companies to bring in semi-skilled or unskilled foreign workers for specific projects," the home ministry official told *ET on Sunday*. Not surprisingly, there's a huge demand for the P visas and according to figures from the ministry of external affairs, there have been 1,000 P visas for the power sector and 400 for the steel sector issued within a year of the category being introduced. "In the past, workers from certain regions – such as China – have faced a lot of problems in getting their employment visas. However, the P category has helped to iron out a lot of these problems," says Amitabh Singh, partner, Ernst & Young India, a consultancy. ■

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CHANGING THE WORLD
Alberta University honours
Sunita Narain

Jayanta Mallick

Kolkata, March 3

The University of Alberta has bestowed Sunita Narain honorary doctorate of law this week. In 2010, the university, which has close ties with IIT-Mumbai, honoured Prof M.S. Swaminathan.

Narain is one of three recipients this year for their contribution towards the understanding of global water challenges. Peter Prof Brabeck-Letmathel and Prof Steve E. Hrudehy at the Canadian University were the other recipients.

Narain, a writer, environmentalist and water security advocate, heads the Centre for Science and Environment — a New Delhi-based research and advocacy organisation.

Twenty years ago, Narain was travelling with a colleague, through the desert of India in a



region well known for droughts and crippling water shortages. It was there she saw a remarkable science of engineering, an experience that influenced her work.

They saw bowl-like structures dotting around local houses in which rainwater were being harvested. The roofs of houses were treated as catchments; the towns were built to canalise water to lakes and ponds. This insight into the art and science of local water

engineering inspired Narain to learn more about traditional water practices.

Today, she feels that the challenges on water require novel solutions to develop water security. For over a decade, she has been working on varied water-related subjects, including scarcity of drinking water, pollution and toxification of water. According to the University of Alberta President, Indira V. Samarasekera, each of these exceptional individuals (the three recipients) is quite literally trying to change the world, and they are succeeding. "Government policy has changed because of them. New farming methods are being adopted around the world and much better environmental monitoring is going on in India and in Alberta," she said at the felicitation function.

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Business Line ND 04/03/2012 p-2

R&D efforts paying off, says Kumar Mangalam Birla

Aditya Birla Group launches research centre in Mumbai

Our Bureau

Mumbai, March 3

The Aditya Birla Group launched its Research and Development Centre at Talaja in Navi Mumbai on Saturday.

The centre is part of the recently-launched Aditya Birla Science and Technology Company (ABSTC), which has been set up at an investment of over Rs 250 crore.

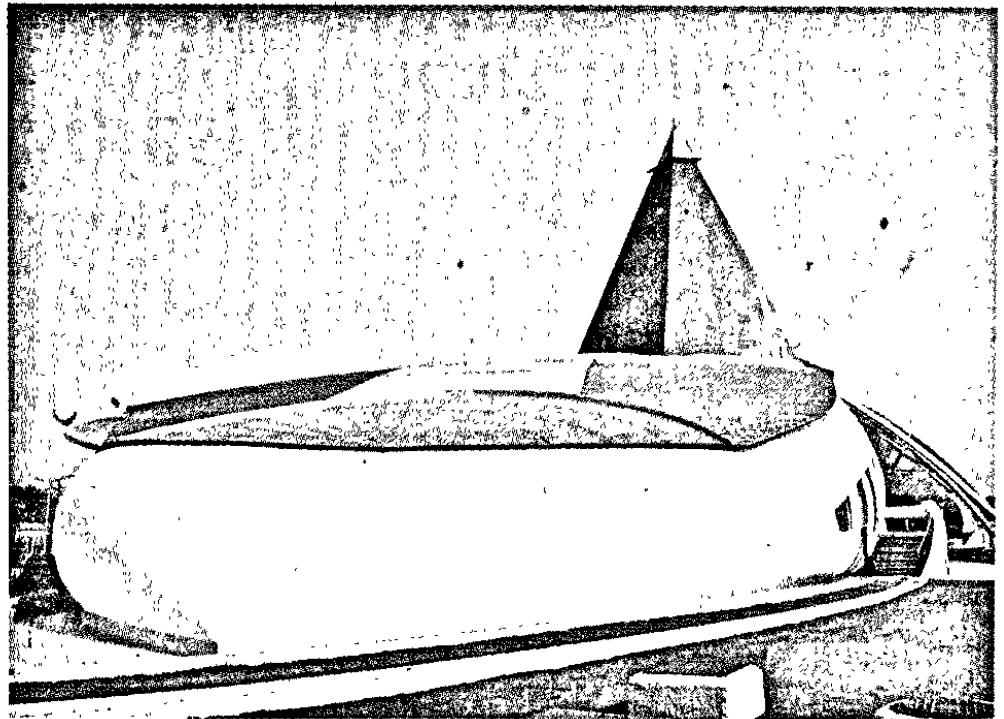
ABSTC will serve as a central hub for the group's global R&D network and will include the R&D facilities of Novelis and Colombian Tech in North America, the epoxy resin R&D centre in Thailand and the pulp laboratories of Domsjo in Sweden.

"The business payoffs of the R&D efforts have already started to kick in," said Mr Kumar Mangalam Birla, Chairman, Aditya Birla Group, inaugurating the R&D centre.

"The most obvious ones include innovative designs and control systems to increase yield, improve quality, achieve higher efficiency and raise capacities. They have also been key in creating consumer products such as Kara, environment friendly urea, innovative metal alloys, particulate aluminium matrix nano-composites, fibre cement blends and geo-polymers."

MANY PATENTS

"Hindalco, Grasim and Aditya Birla Nuvo are the major shareholders of this company along with UltraTech Cement," said Dr Luca Fontana, CEO, ABSTC.



Innovation station: The Aditya Birla Science and Technology Research Centre at Parvel, near Mumbai, serves as the global R&D hub for the Group's businesses. — Paul Noronha

Capacity to accommodate 450 scientists and engineers.
Current headcount is 100.
Filed 60 patents as on date.

The R&D centre has a capacity to accommodate 450 scientists and engineers. However, the present headcount is 100. Nearly half of them have a doctoral degree. The R&D centre has filed 60 patents as on date.

"The R&D centre does not have a revenue model as of now," said Mr Birla. "Howev-

er, it will provide analytical testing services; modelling and simulation services; provide contract research and licence patents to non-competing businesses," said Dr Fontana.

Within the group, any R&D initiative will be funded by an AV Birla group company which will receive a royalty-free patent in return.

The patent will be jointly held by the group company, and ABSTC. However, ABSTC would be free to license the patent to non-competing businesses.

ABSTC has plans to file patents in all countries where it

has an R&D centre and in those markets where the companies sell their products.

The research and development showpiece is equipped to develop new processes and designs, and create new products and applications.

It consists of a process engineering and sciences lab, a science and technology lab, an analytical lab for testing and a knowledge centre with access to the latest books, periodicals, journals and research papers required.

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